

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	<b>MAIL STOP</b>
Luigi Satragno et al.	)	<b>APPEAL BRIEF - PATENTS</b>
Application No.: 10/716,402	)	Group Art Unit: 3737
Filed: November 20, 2003	)	Examiner: Joel Lamprecht
For: COMBINATION MAGNETIC	)	Appeal No.: _____
RESONANCE IMAGING	)	
APPARATUS AND PATIENT	)	
TABLE	)	

**APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated September 17, 2009 finally rejecting Claims 1-4, 6-28, 30 and 32-37, which are reproduced as the Claims Appendix of this brief.

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The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§1.16, 1.17, and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

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I. Real Party in Interest

The present application is assigned to Esaote S.p.A.. Esaote S.p.A. is the real party in interest, and is the assignee of Application No. 10/716,402.

II. Related Appeals and Interferences

The Appellants' legal representative, or assignee, does not know of any other appeal or interferences which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

III. Status of Claims

This application was originally filed with Claims 1-37. During prosecution, Claim 38 was added and Claims 5, 29, 31 and 38 were canceled. Thus, the claims currently pending in this application are Claims 1-4, 6-28, 30 and 32-37. There are no claims objected to or allowed.

Claims 1-4, 6-28, 30 and 32-37 stand finally rejected. Claims 1-4, 6-28, 30 and 32-37 are appealed.

IV. Status of Amendments

No amendments were filed after the Final Rejection mailed September 17, 2009.

V. Summary of Claimed Subject Matter

A. The Invention

A magnetic resonance imaging apparatus has a magnet part with a C or U shape, defining a cavity that is open on three peripheral sides. A patient table is associated with the magnetic resonance imaging apparatus. The patient table is

composed of two parts. A first part of the patient table has a support surface with a hollow that is complementary in shape and corresponding in size to the lower side of the magnet, whereas its outer side may be shaped in any manner, preferably like a circular segment such as to fully surround the central U-shaped hollow of the magnet. The first table part is designed to be slid around a side of the magnet which complements the support surface. The first table part is supported by at least two wheeled legs provided at the end side for connection with the second table part, which is also supported by two wheeled legs provided on the free end side opposite to the one for connection with the first table part.

The second table part, or outer part, rests on a guide. The guide is advantageously made of an arched cylindrical metal section, whose arched profile corresponds to the outer circular profile of the first table part. The first table part has a case to cover the supporting legs and other equipment, which case is superimposed to the case of the apparatus in the assembled condition, thereby providing a particularly aesthetic seamless aspect to the apparatus. Thanks to this design, the table may be coupled to the magnet, thereby forming a complete patient supporting surface, having such a size as to conveniently support the patient body, while reducing the overall size, i.e. the projecting extension of the patient table with respect to the magnet. Moreover, the so-called outer or second table part of the table may rotate around the first table part, which is coupled to and complemented by the lower side of the magnet in such a manner as to have any orientation whatever in the horizontal plane with respect to the first table part.

The magnetic resonance imaging apparatus may be rotated by providing at least the portion of the apparatus that is coupled to the table be supported by a platform rotatable along an annular path, coaxial to the axis of the sliding guide for the table, i.e. for the second table part.

The platform may be rotated in any manner. The platform includes a base plate and an upper apparatus supporting plate, rotary guide means provided between the two plates along the predetermined path, as well as means allowing the two plates to slide relative to each other. The upper plate has a projection which is engaged in a guide track, whereas one or more ball rows are provided between the two plates. The platform is shaped like an annular band coaxial to the table sliding guide, extends and is located coincident with the supporting legs at the front open

side of the magnet structure, said legs resting thereon, and also supports the legs of the first table part.

The legs of the second table part of the table lie directly on the floor, outside the rotating platform and are appropriately wheeled. Similarly, the rear legs or supports of the magnetic resonance imaging apparatus rest on the floor and have wheels. The platform thus only supports the legs of the first table part and the legs of the front side of the magnetic resonance imaging apparatus. The platform is composed of annular bands displaceable along a circular path coaxial to the table part sliding guide for supporting the legs on the front side of the apparatus and the legs of the non rotating first table part, whereas the legs of the table and the rear legs of the apparatus rest on stationary parts of the platform.

B. Mapping the Claims to the Disclosure

Claim 1 recites a system comprising a magnetic resonance imaging apparatus (1 in Figures 1 and 3) and a patient table (2 in Figure 1), wherein the magnetic resonance apparatus has a magnet structure (1 in Figures 1 and 3) defining a cavity (see, Page 7, lines 18-25) for accommodating a part of a body under examination, which magnetic structure is supported by a magnetic structure base block (see, Page 3, lines 14-22), the patient table (2 in Figure 1) having a supporting structure that is slidable in at least one direction (see, Page 8, lines 4-6), wherein the patient table and the magnetic resonance imaging apparatus have a curved connection therebetween that allows relative rotation between the patient table and the magnet structure when connected to each other (see, Figures 1 and 2; Page 7, line 28- Page 8, line 6), the curved connection includes a guide for relative displacement between the patient table and the magnetic resonance imaging apparatus (see, Figures 2 and 5; Page 8, lines 11-17; Page 8, line 23 - Page 9, line 3)), wherein the base block of the magnetic resonance imaging apparatus (1 in Figures 6 and 7) is disposed on a platform (30 in Figures 6 and 7) interposed between the magnetic resonance imaging apparatus and a floor (see, Figures 6 and 7; Page 3, lines 23-24), which platform has a base plate (130 in Figure 6) and an upper magnetic resonance imaging apparatus supporting plate (230 in Figure 6), which upper supporting plate lies over the base plate (see, Figure 6; Page 3, lines

23-28), rotary and sliding guide means (330 and 430 in Figure 6) for rotating and sliding the platform being interposed between said two plates such that the platform is rotatable along an annular path coaxial to an axis of the guide forming the curved connection between the patient table and the magnetic imaging apparatus and the upper support plate is slidable relative to the base plate (see, Figure 6; Page 13, lines 17-23), and wherein the patient table supporting structure (3 in Figures 1-3 and 6) has wheels (4 in Figures 1-3) or rollers for sliding the patient table (2 in Figures 1 and 6) relative to the magnetic resonance imaging apparatus (1 in Figures 1 and 6)(see, Page 8, lines 6-9).

Claim 2 sets forth two or more patient tables (2 in Figure 11) that can be simultaneously coupled to the magnetic resonance imaging apparatus and moved in different positions relative thereto (see, Figure 11; Page 6, lines 23-28; Page 12, lines 21-25).

Claim 3 sets forth that the guide further includes a plurality of guide means for displacement of each of the two or more tables relative to each other and to the magnetic resonance imaging apparatus (see, Page 12, lines 25-27).

Claim 4 sets forth that the guide means comprises an arched guide (5 in Figure 4) and each table (2 in Figures 4 and 11) being connected to a carriage (15 in Figure 4) that can be coupled to said removable connection, wherein the tables have a supporting structure (3 and 602 in Figure 5) with wheels (4 in Figure 5) or rollers sliding.

Claim 6 sets forth that the patient table supporting structure (602 in Figure 6) is also disposed on the platform (30 in Figure 6) interposed between the magnetic resonance imaging apparatus and the floor (see, Page 13, line 24 - Page 14, line 13).

Claim 7 sets forth that the rotary and sliding guide means (430 and 440 in Figure 6) interposed between the base plate and the upper plate of the platform is oriented along at least one straight axis (see, Page 4, lines 1-4).

Claim 8 sets forth that the guide of the curved connection includes a table sliding guide (5 in Figure 4) that has the shape of a sector of a circle (see, Page 12, lines 10-11), whose axis is oriented perpendicular to the floor or to the apparatus supporting surface (Page 4, lines 5-8).

Claim 9 sets forth that the rotary and sliding guide means (430 and 440 in Figure 6) between the base plate (130 in Figure 6) and the upper supporting plate (230 in Figure 6) of the platform for the magnetic resonance imaging apparatus also has the shape of a sector of a circle and is coaxial to the table sliding guide (see, Page 4, lines 9-12; Page 14, lines 18-24).

Claim 10 sets forth that the platform has an annular shape, opposite sides of the magnetic resonance imaging apparatus having slidable support elements which rest directly on the platform, and the table supporting structure lies directly on the platform, which table supporting structure has elements for sliding on the floor (see, Figure 6; Page 13, lines 24-Page 14, line 13).

Claim 11 sets forth that the platform also partly extends beneath the table, coincident with at least the portion of the table supporting structure at the side whereat the table is coupled to the magnetic resonance imaging apparatus sliding guide (see, Page 4, lines 23-27; Page 14, lines 24-28).

Claim 12 sets forth the portion of the platform which supports at least partly the table extends flush with the upper supporting surface of the portion of the sliding platform which supports the magnetic resonance imaging apparatus (see, Page 4, line 26 - Page 5, line 4).

Claim 13 sets forth that the portion of the platform which supports the table is stationary and the table supporting structure has means for sliding or rolling on said portion of the platform (see, Page 14, lines 8-13).

Claim 14 sets forth that the portion of the platform which supports the table has an upper table supporting plate which is slidable along a base plate, whose extension is shaped like a sector of a circle coaxial to the sector shaped sliding guide between the upper support plate and the base part of the platform portion supporting the magnetic resonance imaging apparatus (see, Page 14, lines 18-21; Page 15, lines 4-8).

Claim 15 sets forth that the platform has a magnetic resonance imaging apparatus supporting extension which is designed to also support said apparatus on the side(s) thereof that are not fitted with the table sliding guide (see, Page 15, lines 4-11).

Claim 16 sets forth that at least one side of the cavity forms an extension of the patient supporting surface of the patient table (see, Page 8, lines 20-23).

Claim 17 sets forth that the sector-shaped sliding guides for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table are coaxial to each other, their axis being perpendicular to and intersecting said at least one side of the magnet structure that forms the extension of the patient supporting surface of the table (see, Page 10, lines 19-24).

Claim 18 sets forth that the cavity is open on two parallel sides (see, Figure 1; Page 7, lines 18-21).

Claim 19 sets forth that the magnet structure has three open sides, the three open sides include two opposite parallel sides and one side transverse thereto, and the magnet structure substantially has a C or U shape (see, Figure 1; Page 7, lines 18-21).

Claim 20 sets forth that the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of  $360^\circ$  (see, Page 7, line 28 - Page 8, line 6; Page 8, lines 15-17) .

Claim 21 sets forth that the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of less than  $360^\circ$  (see, Page 7, line 28 - Page 8, line 6; Page 8, lines 15-17).

Claim 22 sets forth that the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of less than  $180^\circ$  (see, Page 7, line 28 - Page 8, line 6; Page 8, lines 15-17).

Claim 23 sets forth that the platform for supporting the magnetic resonance imaging apparatus and at least a portion of the table is composed of elements having the shape of coaxial annular sectors (see, Page 4, lines 13-15; Page 13, lines 24-25; Page 14, lines 18-24).



Claim 24 sets forth that the sides of the magnet structure that form an extension of the table have an outer edge that is arched coaxial to the curved connection, which edge extends along said guide and is superimposed thereto, level with the table surface (see, Figure 1; Page 7, lines 5-8).

Claim 25 sets forth that the guide for relative slidable displacement of at least one of the patient tables and the magnetic resonance imaging apparatus is fitted onto an intermediate table part (102 in Figure 2) that may be removably coupled to the magnetic resonance imaging apparatus (1 in Figure 1) and has a complementary cavity for accommodating the magnet structure sides which form the extension of the tables, said intermediate part of the tables being common to the two or more tables that may be simultaneously coupled to the magnetic resonance imaging apparatus (see, Page 12, lines 4-9).

Claim 26 sets forth that said intermediate part of the table is coupled to the magnetic resonance imaging apparatus, by means of sliding guides, along which the sliding motion occurs along at least one coupling and uncoupling direction, means being provided for locking said intermediate part of the table in the coupling limit stop position and/or in one or more different intermediate positions marking different distances of the intermediate part of the table from the magnet structure of the magnetic resonance imaging apparatus (see, Page 12, lines 20-27).

Claim 27 sets forth that the table is coupled to the magnetic resonance imaging apparatus at one end side and extends radially with respect to the sector-shaped sliding guide (see, Figures 1 and 2; Page 10, lines 19-24).

Claim 28 sets forth a system comprising a magnetic resonance imaging apparatus (1 in Figures 1 and 3); and two patient tables that are coupled to said apparatus (2 in Figure 11), a guide for relative slidable displacement of said patient tables and said apparatus (see, 5 in Figures 2 and 5; Page 8, lines 11-17; Page 8, line 23 - Page 9, line 3), which guide consists of least two diametrically opposite, separate curved sections mounted on opposite sides of the apparatus, which sections extend through an angle of less than 180°, wherein the two separate guide sections are coaxial to each other and the magnetic resonance imaging apparatus may rotate coaxially to said separate guide sections (Page 12, lines 25-27).

Claim 30 sets forth that the two guide sections are diametrically opposite portions of a single continuous sector-shaped guide (Page 12, lines 25-27).

Claim 32 sets forth that the magnetic resonance imaging apparatus and/or the tables have wheels or means allowing them to slide or roll on the floor surface and/or on a platform (see, Page 3, lines 14-22).

Claim 33 sets forth that the two tables have means for locking them in the angular positions in which they are coupled to the magnetic resonance imaging apparatus (see, Page 12, lines 21-25).

Claim 34 sets forth a system comprising a magnetic resonance imaging apparatus (1 in Figures 1 and 3); and at least one patient table or two tables that are coupled to said apparatus, on diametrically opposite sides of a guide for relative slidable displacement of said patient table or tables and said apparatus, which guide has the shape of a sector of a circle (see, 2 in Figures 1, 2 and 11; Page 7, line 28-Page 8, line 6), and at least one platform that rotates with an axis of rotation coaxial to an axis of the sector-shaped guide for the at least one of the tables (see, 30 in Figures 6 and 7; Page 3, lines 23-24), the magnetic resonance imaging apparatus being positioned on said platform (see, Figure 6), whereas the table or tables have means allowing them to slide or roll directly on the floor (4 in Figures 1 and 2).

Claim 35 sets forth that the platform has a circular shape, further comprising an additional annular platform (31 in Figure 7) being provided adjacent and coincident with an area supporting at least a portion of the table supporting structure, which additional platform supports at least a portion of the table supporting structure (see, Page 14, lines 14-17).

Claim 36 sets forth that the annular platform which supports at least a portion of the table structure is also rotatable and coaxial to the platform for supporting the magnetic resonance imaging apparatus and to the axis of the table sliding guide (see, Page 14, lines 18-24).

Claim 37 sets forth that the table supporting structure rests on the rotating additional annular platform in a non slidable manner at one end side, and on the floor or a stationary platform, with the interposition of sliding or rolling means, at the other end side (see, Page 14, lines 8-13).

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1, 6-19, 21-24, 27 and 34-37 stand rejected under 35 U.S.C. § 103(a) as being obvious over Carrozzi et al. (EP 1 004 269) in view of DeMeester et al. (U.S. Patent No. 6,029,081).

Claims 2-4, 20, 25-26, 28, 30, 32 and 33 stand rejected under 35 U.S.C. § 103(a) as being obvious over Carrozzi et al. in view of DeMeester et al. as applied above, and in further view of Tazaki (JP 11028199).

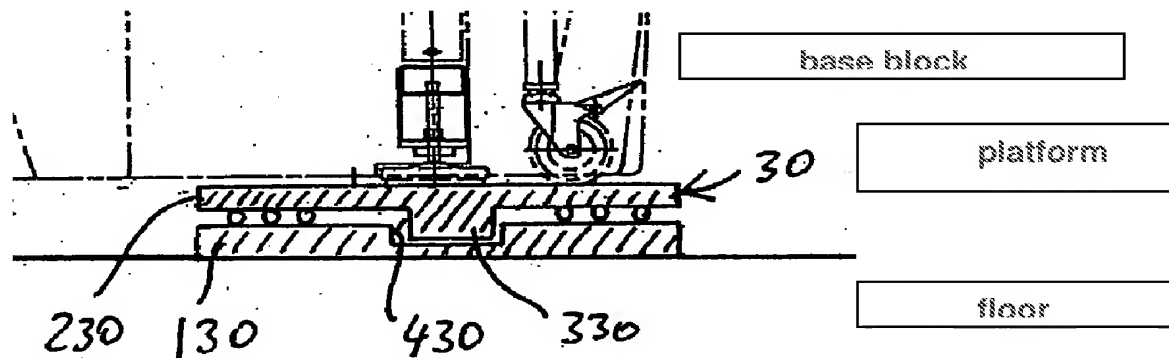
VII. Argument

- A. Claims 1, 6-19, 21-24, 27 and 34-37 stand rejected under 35 U.S.C. § 103(a) as being obvious over Carrozzi et al. in view of DeMeester et al.

Claims 1, 6-19, 21-24, 27 and 34-37 stand rejected under 35 U.S.C. § 103(a) as being obvious over Carrozzi et al. (EP 1 004 269) in view of DeMeester et al. (U.S. Patent No. 6,029,081). This rejection should be reversed for the following reasons.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Office to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Office must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting *a prima facie* case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). Furthermore, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

Independent Claim 1 recites with great specificity, *inter alia*, that a platform has a base plate and an upper supporting plate, and that rotary and sliding guide means are provided such that the platform is rotatable, and that the upper support plate is slidable relative to the base plate. Referring to the accompanying FIG. 6 of the present application set forth below, this structure is clearly shown.



Platform 30 comprises base plate 130, upper support plate 230, and guide means 330, 430 disposed between plates 130 and 230. Hence, since the base block of the magnetic resonance imaging apparatus is disposed on the platform, it is clear that the magnetic imaging apparatus is also displaced when the platform rotates. Applicants respectfully submit that this structural arrangement is not disclosed or suggested by the cited prior art.

Figures 1-4 of Carrozzi are comparable to Figures 1-5 of the instant application, which **do not** include the rotatable platform as shown above in Figure 6.

As described on page 3, lines 20-22 of the present application, the base block of the MRI apparatus may have wheels, rollers or other means for sliding relative a bearing surface, such as the floor or a support platform. As shown in Figures 4-5 of Carrozzi, the base block of the magnetic resonance imaging is disposed on stationary legs resting directly on a floor, as in Figures 1-5 of the instant application - there simply is no platform in Carrozzi, that is, as recited in claim 1, a platform formed by a base plate and an upper plate supporting the base block of the MRI apparatus, with sliding means therebetween for rotating the MRI apparatus.

Regarding DeMeester, the secondary reference relied upon by the Examiner, the Examiner's assertion that "portions of the rotatable MR apparatus support constitute at least a platform that is disposed between the apparatus itself and the

floor and also that exists a base plate and a supporting plate which supports the MRI apparatus” does not provide the teaching of the specific platform structure found to be missing in the primary reference. Accordingly, even combining the references as proposed by the Examiner, Applicant respectfully submits that the invention of claim 1 is not rendered obvious.

Furthermore, DeMeester shows sliding means (rollers or wheels 56) beneath the magnet structure which are intended to be used in a manner such that “the main magnet 20 can be translated to a remote location away from the subject 44 being examined”. This is completely different from the goal of the claimed invention, which is allowing “**relative motion** between the patient table and the magnet structure” in order to optimize the spaces in a narrow room.

Claims 2-4 and 6-27, which depend from Claim 1, are also patentable over the combination of Carrozzi and DeMeester for at least the same reasons as those for which Claim 1 is patentable. Therefore, reversal of this rejection is respectfully requested.

Independent Claim 34 recites a system comprising, *inter alia*, a magnetic resonance imaging apparatus and at least one patient table or two tables that are coupled to said apparatus, on diametrically opposite sides of a guide for relative slidable displacement of said patient table or tables and said apparatus, which guide has the shape of a sector of a circle, and at least one platform that rotates with an axis of rotation coaxial to an axis of the sector-shaped guide for the at least one of the tables, the magnetic resonance imaging apparatus being positioned on said platform.

As set forth above, the primary reference to Carrozzi discloses a magnetic resonance imaging disposed on stationary legs resting directly on a floor -- there simply is no platform in Carrozzi, that is, as recited in claim 34, a platform upon which the MRI apparatus is positioned.

Claims 35-37, which depend from Claim 34, are also patentable over the combination of Carrozzi and DeMeester for at least the same reasons as those for which Claim 34 is patentable. Therefore, reversal of this rejection is respectfully requested.

- B. Claims 2-4, 20, 25-26, 28, 30, 32 and 33 stand rejected under 35 U.S.C. § 103(a) as being obvious over Carrozzi et al. in view of DeMeester et al., and in further view of Tazaki

The Examiner relies upon Tazaki for a motivation for "the use of multiple rotatable and variably positionable tables." However, Figure 2 of Tazaki discloses that one patient table 6 is moved to locations P1-P6. The Examiner further relies on the background of Tazaki for the use of multiple tables attached to an MRI system at variable points around a center portion. However, what Tazaki is actually referring to is a configuration like that in US Patent No. 5,490,513, cited by Tazaki himself, wherein four patient tables are used in order to reduce the amount of time spent in imaging several patients. There is no rotation of the patient tables nor of the magnet itself. Hence, Tazaki fails to provide a suggestion for the simultaneous rotatable connection of two or more tables. Appellants respectfully contend that the prior art fails to suggest two or more tables that can be positioned relative to each other and to the magnetic resonance imaging apparatus, as recited in Claims 2, 28 and independent Claim 34, and that such would not be obvious.

VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

IX. Evidence Appendix

See attached Evidence Appendix for copies of evidence relied upon by Appellant.

X. Related Proceedings Appendix

See attached Related Proceedings Appendix for copies of decisions identified in Section II, supra.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date June 11, 2010

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## VIII. CLAIMS APPENDIX

### The Appealed Claims

1. A system comprising:

a magnetic resonance imaging apparatus; and

a patient table,

wherein the magnetic resonance apparatus has a magnet structure defining a cavity for accommodating a part of a body under examination, which magnetic structure is supported by a magnetic structure base block,

the patient table having a supporting structure that is slidable in at least one direction, wherein the patient table and the magnetic resonance imaging apparatus have a curved connection therebetween that allows relative rotation between the patient table and the magnet structure when connected to each other,

the curved connection includes a guide for relative displacement between the patient table and the magnetic resonance imaging apparatus,

wherein the base block of the magnetic resonance imaging apparatus is disposed on a platform interposed between the magnetic resonance imaging apparatus and a floor, which platform has a base plate and an upper magnetic resonance imaging apparatus supporting plate, which upper supporting plate lies over the base plate, rotary and sliding guide means for rotating and sliding the platform being interposed between said two plates such that the platform is rotatable along an annular path coaxial to an axis of the guide forming the curved connection between the patient table and the magnetic imaging apparatus and the upper support plate is slidable relative to the base plate, and

wherein the patient table supporting structure has wheels or rollers for sliding the patient table relative to the magnetic resonance imaging apparatus.

2. The system of claim 1, comprising two or more patient tables that can be simultaneously coupled to the magnetic resonance imaging apparatus and moved in different positions relative thereto.



3. The system of claim 2, wherein the guide further includes a plurality of guide means for displacement of each of the two or more tables relative to each other and to the magnetic resonance imaging apparatus.

4. The system of claim 3, wherein the guide means comprises an arched guide and each table being connected to a carriage that can be coupled to said removable connection, wherein the tables have a supporting structure with wheels or rollers sliding.

6. The system of claim 1, wherein the patient table supporting structure is also disposed on the platform interposed between the magnetic resonance imaging apparatus and the floor.

7. The system of claim 1, wherein the rotary and sliding guide means interposed between the base plate and the upper plate of the platform is oriented along at least one straight axis.

8. The system of claim 1, wherein the guide of the curved connection includes a table sliding guide that has the shape of a sector of a circle, whose axis is oriented perpendicular to the floor or to the apparatus supporting surface.

9. The system of claim 8, wherein the rotary and sliding guide means between the base plate and the upper supporting plate of the platform for the magnetic resonance imaging apparatus also has the shape of a sector of a circle and is coaxial to the table sliding guide.

10. The system of claim 8, wherein the platform has an annular shape, opposite sides of the magnetic resonance imaging apparatus having slidable support elements which rest directly on the platform, and the table supporting structure lies

directly on the platform, which table supporting structure has elements for sliding on the floor.

11. The system of claim 6, wherein the platform also partly extends beneath the table, coincident with at least the portion of the table supporting structure at the side whereat the table is coupled to the magnetic resonance imaging apparatus sliding guide.

12. The system of claim 11, wherein the portion of the platform which supports at least partly the table extends flush with the upper supporting surface of the portion of the sliding platform which supports the magnetic resonance imaging apparatus.

13. The system of claim 12, wherein the portion of the platform which supports the table is stationary and the table supporting structure has means for sliding or rolling on said portion of the platform.

14. The system of claim 12, wherein the portion of the platform which supports the table has an upper table supporting plate which is slidable along a base plate, whose extension is shaped like a sector of a circle coaxial to the sector shaped sliding guide between the upper support plate and the base part of the platform portion supporting the magnetic resonance imaging apparatus.

15. The system of claim 6, wherein the platform has a magnetic resonance imaging apparatus supporting extension which is designed to also support said apparatus on the side(s) thereof that are not fitted with the table sliding guide.

16. The system of claim 8, wherein at least one side of the cavity forms an extension of the patient supporting surface of the patient table.

17. The system of claim 16, wherein the sector-shaped sliding guides for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table are coaxial to each other, their axis being perpendicular to and intersecting said at least one side of the magnet structure that forms the extension of the patient supporting surface of the table.

18. The system of claim 1, wherein the cavity is open on two parallel sides.

19. The system of claim 1, wherein the magnet structure has three open sides, the three open sides include two opposite parallel sides and one side transverse thereto, and the magnet structure substantially has a C or U shape.

20. The system of claim 16, wherein the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of 360°.

21. The system of claim 16, wherein the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of less than 360°.

22. The system of claim 16, wherein the sector-shaped guide for the table and/or the upper support plate of the magnetic resonance imaging apparatus supporting platform and/or the upper support plate of the extension of said platform, for supporting at least a portion of the table extends through an angle of less than 180°.

23. The system of claim 6, wherein the platform for supporting the magnetic resonance imaging apparatus and at least a portion of the table is composed of elements having the shape of coaxial annular sectors.

24. The system of claim 1, wherein sides of the magnet structure that form an extension of the table have an outer edge that is arched coaxial to the curved connection, which edge extends along said guide and is superimposed thereto, level with the table surface.

25. The system of claim 2, wherein the guide for relative slidable displacement of at least one of the patient tables and the magnetic resonance imaging apparatus is fitted onto an intermediate table part that may be removably coupled to the magnetic resonance imaging apparatus and has a complementary cavity for accommodating the magnet structure sides which form the extension of the tables, said intermediate part of the tables being common to the two or more tables that may be simultaneously coupled to the magnetic resonance imaging apparatus.

26. The system of claim 25, wherein said intermediate part of the table is coupled to the magnetic resonance imaging apparatus, by means of sliding guides, along which the sliding motion occurs along at least one coupling and uncoupling direction, means being provided for locking said intermediate part of the table in the coupling limit stop position and/or in one or more different intermediate positions marking different distances of the intermediate part of the table from the magnet structure of the magnetic resonance imaging apparatus.

27. The system of claim 8, wherein the table is coupled to the magnetic resonance imaging apparatus at one end side and extends radially with respect to the sector-shaped sliding guide.

28. A system comprising:

a magnetic resonance imaging apparatus; and

two patient tables that are coupled to said apparatus,

a guide for relative slidable displacement of said patient tables and said apparatus, which guide consists of least two diametrically opposite, separate curved sections mounted on opposite sides of the apparatus, which sections extend through an angle of less than 180°,

wherein the two separate guide sections are coaxial to each other and the magnetic resonance imaging apparatus may rotate coaxially to said separate guide sections.

30. The system of claim 28, wherein the two guide sections are diametrically opposite portions of a single continuous sector-shaped guide.

32. The system of claim 28, wherein the magnetic resonance imaging apparatus and/or the tables have wheels or means allowing them to slide or roll on the floor surface and/or on a platform.

33. The system of claim 28, wherein the two tables have means for locking them in the angular positions in which they are coupled to the magnetic resonance imaging apparatus.

34. A system comprising:

a magnetic resonance imaging apparatus; and

at least one patient table or two tables that are coupled to said apparatus, on diametrically opposite sides of a guide for relative slidable displacement of said patient table or tables and said apparatus, which guide has the shape of a sector of a circle, and

at least one platform that rotates with an axis of rotation coaxial to an axis of the sector-shaped guide for the at least one of the tables, the magnetic resonance imaging apparatus being positioned on said platform, whereas the table or tables have means allowing them to slide or roll directly on the floor.

35. The system of claim 34, wherein the platform has a circular shape, further comprising an additional annular platform being provided adjacent and coincident with an area supporting at least a portion of the table supporting structure, which additional platform supports at least a portion of the table supporting structure.

36. The system of claim 35, wherein the annular platform which supports at least a portion of the table structure is also rotatable and coaxial to the platform for supporting the magnetic resonance imaging apparatus and to the axis of the table sliding guide.

37. The system of claim 36, wherein the table supporting structure rests on the rotating additional annular platform in a non slidable manner at one end side, and on the floor or a stationary platform, with the interposition of sliding or rolling means, at the other end side.

## IX. EVIDENCE APPENDIX

None

## **X. RELATED PROCEEDINGS APPENDIX**

None